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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/928,415	08/14/2001	Kazuhisa Shishida	H-998	7256

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EXAMINER	
SNIEZEK, ANDREW L	

ART UNIT	PAPER NUMBER
2651	

DATE MAILED: 03/05/2004

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Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/928,415	Applicant(s) SHISHIDA ET AL.	
	Examiner Andrew L. Sniezek	Art Unit 2651	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *01 April 2003*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-11* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☒ Claim(s) *4-6* is/are allowed.

6)☒ Claim(s) *1-3 and 7-11* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *16 November 2001* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☒ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date *6 and 7*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Priority

Acknowledgment is made of applicant's claim for foreign priority based on an application filed in Japan on 6/28/01. It is noted, however, that applicant has not filed a certified copy of the Japanese application as required by 35 U.S.C. 119(b).

Information Disclosure Statement

The information disclosure statements filed 8/14/01 and 4/1/01 have been considered.

Specification

Applicant is reminded of the proper language and format for an abstract of the disclosure.

The abstract should be in narrative form and generally limited to a single paragraph on a separate sheet within the range of 50 to 150 words. It is important that the abstract not exceed 150 words in length since the space provided for the abstract on the computer tape used by the printer is limited. The form and legal phraseology often used in patent claims, such as "means" and "said," should be avoided. The abstract should describe the disclosure sufficiently to assist readers in deciding whether there is a need for consulting the full patent text for details.

The language should be clear and concise and should not repeat information given in the title. It should avoid using phrases which can be implied, such as, "The disclosure concerns," "The disclosure defined by this invention," "The disclosure describes," etc.

The abstract of the disclosure is objected to because it contains the word "means". Correction is required. See MPEP § 608.01(b).

The title of the invention is not descriptive. A new title is required that is clearly indicative of the invention to which the claims are directed.

Claim Objections

Claim 7 is objected to under 37 CFR 1.75(a), as not particularly pointing out and distinctly claiming the subject matter regarded as the invention. Claim 7 sets forth "the control signal" which was not previous provided in the claim.

Claim Rejections - 35 USC § 112

The following is a quotation of the first paragraph of 35 U.S.C. 112:

> The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 8 and 9 are rejected under 35 U.S.C. 112, first paragraph, as containing subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention. Claim 8 sets forth that the average control signal is stored in a memory or on the disk and claim 9 sets forth a compensation value based on the average control signal is stored in a memory or on the disk. The specification does not support storing an average control signal or a compensation value based on an average control signal. It appears that the only signals stored are the average value of a repeatable runout signal and a servo signal compensation value based on the average value of the repeatable runout signal

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in-
> (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effect under this subsection of a national application published under section 122(b)

> only if the international application designating the United States was published under Article 21(2)(a) of such treaty in the English language; or
> (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that a patent shall not be deemed filed in the United States for the purposes of this subsection based on the filing of an international application filed under the treaty defined in section 351(a).

Claims 1 and 7 are rejected under 35 U.S.C. 102(e) as being anticipated by Liu et al.

Re claim 1: Liu et al. teaches a magnetic disk drive including a magnetic disk and a magnetic head to record/reproduce information to/from the disk (figure 1); a driver for positioning the magnetic head over the disk (VCM) and a controller for compensating the servo signal on the basis of the average value of repeatable runout for each servo sector in a plurality of tracks (page 8, paragraph 0087 – page 9 paragraph 0088).

Re claim 7: Claim 7 contains similar limitations to claim 1 which are taught by Liu et al. as discussed above. Claim 7 additionally sets forth that the control signal to the driver is an averaged signal. As broadly as stated this signal is deemed to correspond to the output of summer (238), which output would be an averaged control value that is obtained by the operation of elements (228, 236, 230) to form the single output and which is used to drive the driver.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are

such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

This application currently names joint inventors. In considering patentability of the claims under 35 U.S.C. 103(a), the examiner presumes that the subject matter of the various claims was commonly owned at the time any inventions covered therein were made absent any evidence to the contrary. Applicant is advised of the obligation under 37 CFR 1.56 to point out the inventor and invention dates of each claim that was not commonly owned at the time a later invention was made in order for the examiner to consider the applicability of 35 U.S.C. 103(c) and potential 35 U.S.C. 102(e), (f) or (g) prior art under 35 U.S.C. 103(a).

Claims 2 and 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Liu et al. in view of Nazarian et al.

The specifics of Liu et al. are discussed above and incorporated herein. Claim 2 further sets forth storing the repeatable runout values on the disk or in a memory. Although not specifically taught by Lui et al. such a feature is well known in the art as taught by Nazarian et al. (column 7, lines 14-34) in order to make an "on the fly" adjustment. It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teaching of Nazarian et al. into the arrangement of Liu et al. in order to make on the fly adjustments.

Claims 3 and 11 are rejected under 35 U.S.C. 103(a) as being unpatentable over Liu et al. in view of Melrose et al.

The teaching of Liu et al. is discussed above and incorporated herein. Claim 3 additionally sets forth that the compensation values are stored on the disk or in a memory. Although not specifically taught by Liu et al., such a feature is well known in the art as taught by

Melrose et al. (column 7, lines 15-27) so that they could be used for adjustments for track following. It would have been obvious to one of ordinary skill in the art at the time of the invention to incorporate the teaching of Melrose et al. into the device of Liu et al. so that adjustment in track following could be made.

Allowable Subject Matter

Claims 4-6 are allowed.

The following is a statement of reasons for the indication of allowable subject matter: The claimed magnetic disk drive as set forth in claim 4 that includes a controller which adjusts the positioning error slice level for the head and also halts recording based on the average value of the repeatable runout for each servo sector in a plurality of tracks is neither taught by nor an obvious variation of the art of record. Claims 5-6 depend on claim 4.

Conclusion

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Codilian et al. teaches a similar device that stores compensation values either on the disk or in a memory.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Andrew L. Sniezek whose telephone number is 703-308-1602. The examiner can normally be reached on Mon.-Fri..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, David Hudspeth can be reached on 703-308-4825. The fax phone numbers for the organization where this application or proceeding is assigned are 703-872-9314 for regular communications and 703-872-9314 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-305-4700.

Andrew L. Sniezek
Primary Examiner
Art Unit 2651

A.L.S.
February 29, 2004